

*Abstract*

**Kinase Capable of Site-Specific Phosphorylation of I $\kappa$ B $\alpha$**

The present invention relates, in general, to a kinase which in its activated state is capable of site-specific phosphorylation of I $\kappa$ B $\alpha$ , I $\kappa$ B $\alpha$  kinase. In particular, the present invention relates to the purified kinase, antibodies having binding affinity specifically to the kinase, and hybridomas containing the antibodies. This invention further relates to bioassays using protein or antibodies of this invention to diagnose, assess, or prognose a mammal afflicted with an undesired activation of NF- $\kappa$ B. This invention also relates to ligands, agonists, and antagonists of the kinase, and diagnostic and therapeutic uses thereof. This invention also relates to bioassays using the kinase to identify ligands, agonists, and antagonists. More specifically, this invention relates to selective inhibitors of the kinase.